

JONES DECLARATION

EXHIBIT A



The Embedded Systems Experts

Curriculum Vitae of **Nigel Jones. 10087 Masser Rd, Frederick MD 21702**

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Summary

An expert in embedded systems including both software and hardware. Extensive experience in system modeling and analysis. Extensive experience in reverse engineering and secure systems. Excellent communication skills. Admitted in U.S. District Court as a testifying expert witness.

Present Activities

R.M.B. Consulting Inc., *President* 1995 – Present

Representative Design Work

- Matlab & Simulink modeling of a novel form of digital modulation that is expected to radically alter the digital communications market.
- Hardware design of a system for use on surface mount production lines.
- Design of a highly fault tolerant, distributed data acquisition and control, system for a rebreather (a form of SCUBA gear that re-circulates the gases). Responsibilities included system architecture, hardware design and layout, embedded firmware, documentation.
- Redesign of a large LCD panel. Project required reverse engineering of an existing product, together with hardware and firmware design.
- Hardware & firmware for controlling a unique, battery powered diesel burner. This involved the control and sequencing of various motors, power management, safety interlocks, and user interface.
- Design and implement multiple device drivers for complex Integrated circuits used in the Telecommunications industry. Devices included AAL1 (Infineon IWE8), AAL5 (Conexant RS8234), IEEE 802.3 / Ethernet (AMD Am79C973 and Motorola MPC8260). The device drivers were written in C running in a VxWorks environment. The Ethernet / AAL5 drivers were developed as an integrated suite and achieved a performance level more than ten times faster than the fastest product available in the industry.
- Design and implementation of firmware to control two different Microwave radios.

Representative Expert Witness Work

- Reverse engineering of Set Top Box hardware and software
- Code review to understand product security mechanisms.
- Hardware and / or software review of devices to understand their functionality and to see if the devices are infringing on copyright or patent claims.

R.M.B. Consulting Inc. Client List for the last ten years

- Aegis Industrial Software Corporation
- Astrapi
- Babington Engineering
- Bell TV
- Blue Water Imagineering
- Brivo Systems
- Copper Beech Ventures
- Covert Security Solutions
- DISH Network*
- EchoStar *
- Global Secure Safety
- Fox Television*
- NBC Universal*
- Med-Fit Systems
- NagraStar*
- NIST
- Nielsen Kellerman
- Powerprecise
- Schonstedt Instrument Company
- Sensortech Systems
- Simma Software
- Stone Aerospace
- Tri-State Surgical *
- Unitec Electronics
- Wildwood Engineering

* Indicates an expert witness engagement.

Barr Group, *Chief Engineer* 2006 – Present

Representative Design Work

- Hardware and firmware design of a monitoring system for a load tap changer used in power sub stations.
- Design of a medical device.

Representative Expert Witness Work

- Code review of a secure Smart Card to understand its vulnerabilities.
- Code review of engine control modules (ECM) to determine if the ECM can cause unintended acceleration.
- Code review of base station software to determine if it is practicing patented claims.

Barr Group Client List for the last ten years

- Alertus
- ABB
- Adaptix*
- BTE
- NDS*
- Estate of Ida St. John*

- Shirlene Van Alfen*
- Hagens Berman*
- Texas Embedded Solution*
- Alice and Richard Thall*
- Kong Iu Leong and Sio-Keng Leong*
- Janice Ann Dushane*
- Jean Bookout and Charles Schwarz*
- ClotBusters
- Rockwell Collins
- J-Systems
- QAT

* Indicates an expert witness engagement.

Related Past Experiences

PowerPrecise Solutions, *Director of Engineering*, 2004 – 2005

Led and assisted in the invention and realization of novel, patentable technologies to improve laptop battery lifetime; several patent applications were filed and the company was later purchased by Texas Instruments for the intellectual property thus generated

Patents

Method and Apparatus for Detecting Impedance, U.S. Patent No. 7,259,572

Method and Apparatus for Brightness Control of Indication Lights, U.S. Patent No. 7,477,158

Two patents pending relating to innovations in portable life support systems.

Three patents pending relating to digital modulation techniques.

Education

BSc, Electrical and Mechanical Engineering, *Brunel University, London*, 1983

Publications

Articles and Papers

Jones, Nigel. "Efficient C Code for 8-bit Microcontrollers," *Embedded Systems Programming*, Nov 1998.

Jones, Nigel. "Arrays of Pointers to Functions," *Embedded Systems Programming*, May 1999.

Jones, Nigel. "Controlling the Transmit Enable Line on RS-485 Transceivers," *Embedded Systems Programming*, Aug 1999.

Jones, Nigel. "In Praise of the #error Directive," *Embedded Systems Programming*, Sep 1999.

Stone, am Ende, Wefer, and Jones. "Automated 3D Mapping of Submarine Tunnels," *Robotics 2000: ASCE Conference on Robotics for Challenging Environments*, Feb 2000.

Jones, Nigel. "A 'C' Test: The 0x10 Best Questions for Would-be Embedded Programmers," *Embedded Systems Programming*, May 2000.

Jones, Nigel. "Support Multiple Languages," *Embedded Systems Programming*, Feb 2001.

Jones, Nigel. "Introduction to C's Volatile Keyword," *Embedded Systems Programming*, Jul 2001.

Jones, Nigel. "Introduction to Lint," *Embedded Systems Design*, May 2002.

Jones, Nigel. "Introduction to MISRA-C," *Embedded Systems Design*, Jul 2002.

Jones, Nigel. "Optimal C Constructs for the 8051," *Embedded Systems Design*, Oct 2002.

Jones, Nigel. "Learn a New Trick with the offsetof() Macro," *Embedded Systems Design*, Mar 2004.

Jones, Nigel. "Minimizing ISR Overhead," *Embedded Systems Design*, Jan 2007.

Sieber, Jones, et.al. "Embedded Systems in the Poseidon MK6 Rebreather," *WISES 2009*, Jun 2009.

Blog

Stack Overflow. Archive available at <http://www.embeddedgurus.com/stack-overflow/>

Expert Witness Engagements

- Testimony at deposition and at trial for the defendant in US District Court for the Central District of California in *EchoStar Satellite Corporation, et al. v. NDS Group PLC et al.*, Case No. SA CV 03-950 DOC(JTL). Disposition: Verdict favorable to the defendant. Costs of over \$18m awarded to the defendant.
- Testimony at deposition for the plaintiff in Ontario Superior Court of Justice in *DISH Network et al. vs. Angel Electronics Inc. et al.*, Case No. CV-10-8790-00CL. Disposition: pending.
- Testimony at deposition for the defendant in US District Court for the Eastern District of New York in *Point4 Data Corporation and Dynamic Concepts, Inc. vs. Tri-State Surgical Supply & Equipment Ltd, et al.* Case number 11 CV 0726 (RJD). Disposition: Pending.
- Testimony at deposition for the plaintiff in US District Court for the Central District in Estate of Ida St. John v. Toyota Motor Corporation ,et al., Case No: 8:10-cv-01460-JVS-FMO. Disposition: Pending
- Testimony at deposition for the plaintiff in US District Court for the Central District in *Shirlene Van Alfen, et. al. v. Toyota Motor Sales, U.S.A., Inc.*, Case No: CV11-08120JVS. Disposition: Settled under confidential terms. Six expert reports were simultaneously filed in *Toyota Motor Corp. Unintended Acceleration, Marketing, Sales Practices, and Products Liability Litigation*, Case No: 8:10ML2151 JVS. Disposition: Settled for \$1.1B.
- Testimony at deposition for the complainant in the ITC in *Certain Wireless Communications Base Stations and Components Thereof*. Inv. No. 337-TA-871. Disposition: Complaint withdrawn.
- Expert report for the plaintiff in US District Court for the Southern District of California in *EchoStar Satellite LLC et al., vs. Sonicview et al.*, Case No: 09-cv-1553-L(WVG). Disposition: \$65m summary judgment.
- Expert report for the plaintiff in US District Court for the Southern District of California in *DISH Network et al., vs. Vicxon Corporation et al.*, Case No: 12-CV-00009 L (WVG). Disposition: \$27m summary judgment.
- Expert report for the plaintiff in US District Court for the Southern District of California in *EchoStar Satellite LLC et al., vs. Christopher Whitcomb et al.*, Case No. 11-cv-0333-W-RBB. Disposition: PI and summary judgment granted.
- Expert report for the plaintiff in US District Court for the Central District of California in *EchoStar Satellite LLC et al., vs. Warren Edwin Scheibe.*, Case No: 2:10-cv-04561-SJO_E. Disposition: \$25m agreed judgment.
- Expert report for the plaintiff in US District Court for the Southern District of California in *EchoStar Satellite LLC et al., vs. Viewtech, Inc and Jung Kwak*, Case No: 07cv1273 BEN (WVG). Disposition: \$214m summary judgment.
- Expert report for the plaintiff in US District Court for the District of New Jersey in *EchoStar Satellite LLC et al., vs. Sonysat LLC et al.*, Case No: 10-cv-01337-FSH-PS. Disposition: TRO and seizure granted. Case settled.
- Expert report for the plaintiff in Ontario Superior Court of Justice in *DISH Network et al. vs. Ravin Ramkissoon. et al.*, Case No. 09-CL-8091-00CL. Disposition: Anton Pillar request granted. Defendant jailed for contempt.
- Expert report for the defendant in *Eutronix v. Texas Embedded Solution*. Disposition: Plaintiff withdrew case after submission of expert report.
- Expert report for the plaintiff in US District Court for the Central District of California in *EchoStar Satellite LLC et al., vs. Global Technologies Inc.*, Case No: 2:07-CV-05897-JZ-PLA. Disposition: \$626m summary judgment.
- Expert report for plaintiff in US District Court for the Northern District of California in *EchoStar Satellite LLC et al., vs. Freetech Inc.*, Case No: CV-07-6124 (JW) (RS). Disposition: \$106m agreed upon judgment.

- Expert report for plaintiff in US District Court for the Central District of California in *EchoStar Satellite LLC et al., vs. Panarex Inc.*, Case No: CV07-5897 GPS (PLAx). Disposition: \$121.7m agreed upon judgment.